OE FORM 6000, 2'69

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

ERIC REPORT RESUME

ERIC ACC. NO.				IS DOCUMENT COPYRIGHTED?	YES ☐ NO ☒
ED 042 068				ERIC REPRODUCTION RELEASE?	YES ☐ NO ☒
CH ACC. NO.	P.A.	PUBL. DATE	ISSUE	LEVEL OF AVAILABILITY	I ☒ II ☐ III ☐
AA 000 606	24	Jun 70	RIEJAN71		

AUTHOR Nicholi, Armand M.,II

TITLE

An Investigation of Harvard Dropouts. Final Report.

SOURCE CODE	INSTITUTION (SOURCE)
MGG30750	
SP. AG. CODE	SPONSORING AGENCY
RMQ66004	

EDRS PRICE	CONTRACT NO.	GRANT NO.
0.50;3.85		OEG-1-8-0018-0039-C57
REPORT NO.		BUREAU NO.
		BR-8-A-018

AVAILABILITY

JOURNAL CITATION

DESCRIPTIVE NOTE 75p.

DESCRIPTORS

*Dropouts; *College Students; *Higher Education; *Dropout Characteristics; *Student Characteristics; Mental Health; Academic Ability; Academic Performance; Dropout Research; Family Background

IDENTIFIERS
*Harvard College

ABSTRACT

Approximately half of the 7,000,000 students currently enrolled in college will fail to complete their education. This study investigates the causes of this high attrition rate by examining the records of 1,454 undergraduates who dropped out of Harvard College for various reasons over a 5-year period. Sources of the data were: (1) Registrar's records; (2) psychiatric records; and (3) questionnaires yielding follow-up information sent to each of the sample who had failed to return to Harvard by September 1963. Some of the major findings were: (1) 24% of each class withdraws during its 4 years in college; (2) more than 43% of the sample left for psychiatric reasons; (3) more than 700 of the students who withdrew failed to get a degree from Harvard, and 420 of these failed to get a degree from any college; (4) the majority of students gave personal or medical reasons as the primary cause for dropping out; (5) although the dropouts had high academic potential, their academic performance at the time of leaving college was poor; and (6) American blacks had a higher dropout rate than the average undergraduate. African blacks, however, had a much lower dropout rate. This report discusses in detail the differences between the psychiatric dropout and the general dropout in terms of family and school background, academic record, field of concentration and return to college. (AF)

GPO 870-390

ED 042 068

BR-8-A-018
PA 24

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

FINAL REPORT
Project No. 8A018
Grant No. 1-8-0018-0039-057

AN INVESTIGATION OF HARVARD DROPOUTS

Armand M. Nicholi, II, M.D.
Harvard University
Cambridge, Massachusetts 02139

June 1970

The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

AA000 606

TABLE OF CONTENTS

Introductory Section

I. SUMMARY page 1

II. INTRODUCTION page 5

III. METHODS page 8

Findings and Analysis

IV. GENERAL PROFILE OF THE DROPOUT page 10

V. THE PSYCHIATRIC DROPOUTS page 23

VI. PRIMARY DIAGNOSIS page 35

Conclusions and Recommendations

VII. CONCLUSIONS page 47

VIII. RECOMMENDATIONS page 54

Supplementary and Appendix Materials

APPENDIX A page 57

APPENDIX B page 63

APPENDIX C page 64

APPENDIX D page 65

REFERENCES page 74

BIBLIOGRAPHY page 75

I. SUMMARY

Approximately half of the 7,000,000 students currently enrolled in our colleges and universities will fail to complete their college education. This project investigates the causes of this high attrition rate by exploring in depth a large number of young men who interrupted or terminated their college careers. The sample comprises 1,454 undergraduates who dropped out of Harvard College for various reasons during a five year period.

A few of the questions raised by this research include:

(1) What characterizes the student prone to withdraw from college?

(2) With a college degree increasingly becoming an economic necessity, what causes such large numbers of young men to interrupt or terminate their college careers?

(3) Does emotional illness play a significant role in the decision to withdraw from college?

(4) What happens to the student who withdraws?

(5) What happens to the student who leaves college for psychiatric reasons?

(6) Are diagnostic categories helpful indicators of the direction a student's life will take once he leaves college?

(7) Does coming from a home with divorced or deceased parents influence ones probability of withdrawing from college?

(8) Does attending a private school make one more or less prone to dropping out of college for psychiatric reasons?

(9) Is there a relationship between specific types of emotional illness and major field of concentration?

(10) Is there a relationship between specific types of emotional illness and academic potential?

Data was collected on the sample of 1,454 undergraduates from the Registrar's records, from the psychiatric records of the University Health Services, and from questionnaires yielding follow-up information. Controls used comprise population statistics on two entire classes attending college at the same time as the sample, and a random selection of 200 students also attending the University at approximately the same time.

The data was collected, placed on punch cards, transfered to tape, and analyzed by computer, using the DATA TEXT System. Although more than 43 specific findings are presented in the body of this report, only a sampling of them can be mentioned in this summary. These findings result from analysis of only 2 of 90 available variables, leaving the bulk of our data unanalyzed. Detailed cross-tabulations and multi-variate analysis were carried out on these two variables to ascertain answers to the questions posed above. Analysis of the remaining 86 variables is planned for future projects.

24% of each class withdraws during its four years in college. Emotional illness far outweighs every other cause for leaving college. More than 43% of the sample left for psychiatric reasons. The psychiatric records of the University Health Services revealed that 556 students (38.3% of the total sample) suffered emotional conflicts sufficiently severe to prompt them to seek medical help before leaving and to be given, by the psychiatrist, a specific diagnosis. About 5% of the sample who did not consult a psychiatrist before leaving consulted one afterwards.

More than 700 of the students who withdrew failed to obtain a degree from Harvard, and approximately 420 of these students failed to obtain a degree from any college, thus terminating their formal education.

If a student withdraws, he is likely to:

1) leave college for psychiatric reasons
2) leave voluntarily rather than under compulsion
3) have high intellectual endowment which, because of emotional conflicts, has become impaired

4) major in the social sciences

5) have a private school background

6) seek psychiatric help before and after leaving

7) have divorced or deceased parents

8) return to college if his father is deceased, but fail to return if his mother is deceased

9) attend one or more other college, if he fails to return to college

10) have a 25% chance of obtaining a college degree from any institution.

The percent of students who visited a psychiatrist was approximately four times greater among the dropouts than among the general undergraduate population.

The psychiatric dropouts returned to college sooner than the non-psychiatric dropouts, but also tended more frequently to drop out a second time. However, they tend to graduate as frequently as the non-psychiatric dropouts.

Voluntary withdrawals are more frequent among the psychiatric dropouts; they have higher academic potential, in general, than the non-psychiatric dropouts.

Although more students with private school backgrounds drop out on the whole, students with public school backgrounds have a greater tendency to leave for psychiatric reasons than students with private school backgrounds.

The psychiatric dropouts tend to:

1) have higher academic potential and intelligence than the non-psychiatric dropouts

2) major in Math and the Biological Sciences

3) enter the military more frequently than the non-psychiatric dropouts

4) return and graduate from Harvard as frequently as the non-psychiatric dropouts

5) if not returning to Harvard, attend and graduate from other colleges less frequently than the non-psychiatric dropouts; when they do graduate from Harvard, however, they are more apt than the non-psychiatric dropouts to do so with distinction

6) have a higher parental divorce rate than the non-psychiatric group

The specific types of mental illness that afflict students that tend to withdraw from college are discussed in detail. For each type of mental illness, the following factors have been ascertained:

1) probability of returning to Harvard

2) academic potential

3) academic performance

4) secondary school background

5) major field of concentration

6) probability of attending and graduating from another college.

Supplementary research reported in an appendix revealed that Black students have a significantly higher probability of leaving college than do white students.

The body of this report outlines the implications and recommendations for practical application of the results. The investigator describes his plans to analyze the remaining 88 variables in future studies and to further investigate the significant and timely data on Black students presented in Appendix D.

II. INTRODUCTION

With a college degree becoming an economic necessity for an ever-increasing number of people living in our era of advanced technology, the high college attrition rate has become critical, not only for the individual, but for the entire society. About half of the 7 million students now enrolled in our colleges and universities will fail to complete their college education. This national dropout rate has persisted within our institutions of higher learning for several years. (1)

A. GENERAL PURPOSE

The present research explores the causes of this high attrition rate by investigating in depth a large number of young men who interrupted or terminated their college careers. The sample comprises 1,454 students who dropped out of Harvard College for various reasons over a five year period.

B. SPECIFIC AIMS

The research will answer, among others, the following questions:

1) What are the causes motivating this large number of young men to interrupt or terminate their college careers?

2) Are psychiatric factors important determinants for those who suspend their studies?

3) What happens to those students who drop out for psychiatric reasons? Do they return to college as frequently as those who drop out for all other reasons?

4) Are diagnostic categories, when applied to these young people, helpful indicators of future academic progress?

5) Is there a correlation between specific types of emotional illness, as indicated by the diagnostic categories, and: a) intelligence, b)major field of concentration?

6) Are there common denominators among those who drop out for psychiatric reasons that would suggest a genetic and dynamic formulation of the particular conflicts that lead to dropping out, and that will prove helpful to admissions' committees and others within our colleges and universities?

C. BACKGROUND

This project attempts to overcome the deficiencies in dropout research so carefully delineated by Dr. Lawrence Kubie. (2) Taking a macroscopic view of previous studies of college dropouts, one can categorize them in terms of basic deficiencies.

The first and largest category consists of tabulations and statistical analysis based on information from application forms and registrar's records. (3,4) These studies contain large numbers of students, but make little effort to delve into deeper psychological determinants. In addition, the lack of sufficient controls and follow-up efforts makes this group of studies of limited and questionable value.

A second category comprises those few efforts which have undertaken in-depth studies of a limited number of students in order to understand the detailed dynamics involved in the decision to terminate college work. (5,6,7) Unfortunately, however, they too suffer, not only from lack of controls, but also from a sample too small to be representative. For example, in Farnsworth's (et al) study, the sample consisted of but nine students, a sample too limited to allow generalization of results.

The present project attempts to overcome these deficiencies by employing a relatively large sample (1,454), yet executing a detailed, in-depth analysis using a rich variety of resources. Highly standardized data from registrar's records, University Health Service records (including psychiatric reports), and questionnaires is subjected to precise statistical investigation within a carefully planned research design. A three to ten year follow-up supplements information gathered at the time of withdrawal.

D. DEFINITIONS

For the purpose of this study, the term 'dropout' will be applied to anyone who interrupted his college education for any reason within the span of time under consideration.

The term 'psychiatric dropout' will refer to those students who consulted a psychiatrist one or more times before leaving and who were given, by the psychiatrist, a specific psychiatric diagnosis. These psychiatric dropouts were classified into primary and secondary diagnostic categories defined in the revised edition (1962) of the International Classification of Disease, Adapted, and the American Psychiatric Association's Psychiatric Glossary, second edition, 1964.

All other dropouts, who left for a variety of non-psychiatric reasons (i.e., travel, physical illness, financial, study abroad, etc.), will be referred to as 'non-psychiatric dropouts'. A certain number of students, about 4% of the total, visited a psychiatrist before leaving only to discuss their decision to leave and had no recognizable psychiatric disorder. These students are therefore numbered among the 'non-psychiatric dropouts'.

An important element in this study is the 'Predicted Rank List' (PRL), the University's evaluation of academic potential, compiled by the Office of Admissions for each student applying to Harvard. Many within the Office of Admissions and the Office of Tests consider it a more accurate indicator of intelligence and scholastic ability than any standard I.Q. test. The student is assigned a Predicted Rank List rating on the basis of: (1) rank in high school class, (2) Verbal Scholastic Aptitude Test of the College Board, and (3) average of the Achievement Test scores of the College Board. (The Aptitude score is given slightly more weight for the public school student.) The Predicted Rank List range is from I (indicating the highest potential) to VI and Unsatisfactory (indicating the lowest potential).

This combination of College Board scores and high school grades gives an index which, for the majority of undergraduates, effectively predicts their

actual Rank List, compiled at the end of each semester by the Registrar's Office. The actual Rank List is based on college grades: Rank List I is equal to an A average; Rank List III, to a B average; and Rank List V, to a C average. In a recent study of Harvard freshmen, 94% earned a Rank List rating that differed from their Predicted Rank List by no more than one. 43% earned their actual PRL. (8)

Because we had, for each student who withdrew from college, a Predicted Rank List as well as an actual Rank List rating at the time of withdrawal, we were able to formulate an index of achievement, titled the 'Prediction-Performance Gap'. A student was categorized as 'underachieving' or 'overachieving' only if his actual Rank List at the time of withdrawal differed from his Predicted Rank List by more than one; otherwise, his performance was considered congruent with his predicted potential.

III. METHODS

A. DATA COLLECTION

(a) Sample (N): The sample was obtained by collecting from the Registrar's Office the names of all students who dropped out of Harvard College between September of 1955 and June of 1960. A total of 1,454 young men withdrew from Harvard over this five year period. As a second step, psychiatric records of the University Health Services were checked to ascertain which of these 'dropouts' consulted a psychiatrist before leaving. The 556 students diagnosed by a University doctor form a sub-group of the sample referred to as 'psychiatric dropouts'.

(b) Sources of Data: Data was collected from the following:

(1) Registrar's records, which contain a wealth of information on a student's intellectual ability and academic performance - i.e., high school grades, College Board scores, rank in high school class, Predicted Rank List, college grades, bi-annual Rank List ratings, etc. In addition, they reveal whether a student's parents are divorced or deceased.

(2) Psychiatric records of the University Health Services which provide, for each student seen by a psychiatrist, a clinical diagnosis as well as valuable information about a student's family background.

(3) Questionnaires sent to each of the sample who had failed to return to Harvard by September of 1963, providing information for a three to ten year follow-up.

(c) Variables: More than 90 variables were collected from these sources. Only a fraction of them were analyzed for this report.

B. CONTROLS

Control data comes from three principal sources. From the Office of Admissions, we were able to obtain population statistics, compiled in the first semester of the freshman year, for the Classes of 1959 and 1960, the only two classes whose entire college careers occur within the temporal boundaries of our study; the dropout population of these two classes comprises a significant portion of our sample. From the Office of Tests, we were able to obtain population statistics on the same classes compiled in the last semester of the senior year. Despite the slight discrepancy in time, we also used, when necessary, some data from the 'Harvard Student Study' which investigated in detail various facets of the lives of 200 students randomly selected from the Classes of 1964 and 1965. This study, for example, contains the only population statistics on parental divorce.

C. STATISTICAL TOOLS

The data mentionned above was collected, coded, placed on punch cards, recorded on tape, and analyzed by computer, using the DATA TEXT System devised by Dr. Arthur Couch (formerly of Harvard, now at the Hampstead Clinic in London, G.B.). His assistant, Miss Mary Hyde, aided computer analysis of the data.

Beyond the basic descriptive statistics that describe the distributions of scores for each experimental group, the researchers isolated specific group differences, such as Chi-Square, analyses of variants, etc. These uni-variate tests informed the selection of a number of variables used in the multi-variate discriminant analyses described below.

In general, the strategy employed to answer the questions posed was a standard multiple discriminant analysis function which yielded significant differences among groups on all the variables in the data set considered singly and developed a prediction devise based on these differences that estimated the membership of each individual in each of the groups. The success of this classification of subjects, given their various measures and responses, indicated the extent to which group differences were significant enough to allow the larger spectrum of scores to indicate group membership. This technique, a powerful analytic tool for analyzing group differences, allowed the use of non-continuously coded variables as part of the prediction battery.

Detailed cross-tabulations and multi-variate analysis were carried out on two of the 90 variables in order to ascertain answers to the questions posed by the original application for support. With additional funds we hope to continue analysis of the remaining 86 variables.

IV. GENERAL PROFILE OF THE DROPOUT

This section describes the variables pertinent to this study and elucidates a general profile of the dropout; statistics are based on the total sample (1,454). Subsequent sections, based on multi-variate analysis of two variables, will articulate the differences between a few significant subsets. Based on only a small portion of the available data, the current study leaves the bulk of the collected and coded material unanalysed. Such material provides a substantial base for future work.

What percent of each class drops outs of Harvard during the course of its college career? After ascertaining the surprisingly large number to withdraw in toto in so brief a span of time as five years (i.e., 1454), the investigators first used this finding to determine the withdrawal rate per class. Focusing on the two classes of 1959 and 1960, with dropout populations of 245 and 227 respectively, we found the attrition rate for each class to be 24%. This figure coincides remarkably with the more general calculations of the Office of Tests at Harvard; their statistics reveal that the 24% rate has remained essentially constant over the past 15 years - despite the increase in the median of College Board scores. (This constancy, in spite of indications of increased academic potential, confirms our clinical impression that factors other than academic incompetance play a significant role in the dropout phenomenon.)

Of the 1,454 students who left college, how many eventually returned to Harvard to continue their studies? How many eventually attained a Harvard degree? Table 1 shows the rate of withdrawal and return for the entire sample. Although 77.6% of the 1,454 returned to college, 41.9% of those returning dropped out a second time. Some dropped out a third and even a fourth time. More than three years after the last of our sample dropped out of college, 47.4% were still out. 701, or 48.2%, had returned and graduated from Harvard, while the remaining 65 (about 4.4%) had undergraduate status. These figures may alter slightly over time, as some undergraduates graduate and others drop out again, but nothing will temper the startling fact that, within a brief span of five years, approximately 700 Harvard students (approximately 50% of the number who withdrew) will fail to obtain a Harvard degree. (See Appendices A and B for details of sample collection, follow-up, and methodology.)

What are the reasons that motivate such large numbers of highly intelligent students to interrupt or terminate their college studies? We used four different methods to ascertain the answer to this question.

TABLE 1

RATE OF WITHDRAWAL AND RETURN: TOTAL SAMPLE†

			Return		No Return	
1st Withdrawal:	1,454	(100.0)	1,128	(77.6)*	326	(22.4)*
2nd Withdrawal:	474	(41.9)**	148	(30.5)*	326	(69.5)*
3rd Withdrawal:	44	(31.0)**	9	(20.5)*	35	(79.4)*
4th Withdrawal:	1		0		1	

TOTAL RETURN:	766	(52.6)
TOTAL NO RETURN:	688	(47.4)
	1,454	(100.)

Graduated: 701 (48.2)

Under-graduates: 65 (4.4)

766 (52.6)

*% of those who withdraw

**% of those who return

†As of March, 1964.

TABLE 2

CONDITION OF FIRST WITHDRAWAL:

ACTION OF THE ADMINISTRATIVE BOARD

	Total	Percent
Leave of Absense	465	32.0
Allowed to Withdraw	355	24.4
Record Complete	9	.6
Connection Severed	309	21.3
Probation Closed	257	17.7
Required to Withdraw	46	3.2
No Reason	13	.9
	1,454	100.0

TABLE 3

STUDENT'S REASON FOR FIRST WITHDRAWAL:

AS STATED ON LEAVING

	Total	Percent
None	626	43.2
Personal	394	27.2
Medical	162	11.2
Other College	84	5.8
Military	76.	5.2
Financial	45	3.1
Study Abroad	30	2.1
Death	13	.9
On Probation	10	.7
Graduate School	5	.3
Work	2	.1
Brussels Fair	1	.1
Religion	1	.1
	1,454	100.0

First, we investigated the reason given by the administrative board of the University at the time of the student's withdrawal and recorded on the record card in the Registrar's Office. Table 2 reveals the official conditions of withdrawal. 57% of the total left voluntarily; 42.1%, under compulsion from the University. For those who dropped out a second time, the percent compelled to leave had increased; about half of those leaving fell into each general category.

Secondly, we recorded the reason given by the student himself at the time of his withdrawal, also recorded on the record card. Table 3 reveals that for those students who gave a reason, the majority left for personal or medical reasons. Both of these categories of response, which add to 38.1%, may indicate that emotional factors play a significant role in the decision to leave. For those who drop out a second, and even a third, time, medical and personal reasons increase in importance.

Thirdly, we examined the psychiatric records of the University Health Services and ascertained the number of students for whom emotional conflict was the primary determinant of withdrawal. 38.3% of the sample fall into this category. Sections IV and V will discuss these findings in detail.

Fourthly, we sent questionnaires to all students who left Harvard and failed to return and graduate.* These too provided, in the student's own words, the reasons why he felt he had left. The appropriate question read: "In retrospect, what do you consider your reasons for leaving Harvard? Please list in order of importance." Table 4 shows the primary reason listed. 40.9% listed a reason that could be considered 'psychological' - i.e., immaturity, motivation, emotional, or mental health. 28.6% cited academic difficulty. 36.8% listed a 'psychological' reason as second in importance, with 13.4% citing academic difficulty in this category.

It is significant that approximately 39% of the students left because of emotional disorder. The 38.3% figure obtained from the psychiatric records closely approximates the 40.9% figure obtained from the questionnaires.

*See Appendices A and B.

TABLE 4

STUDENT'S PRIMARY REASON FOR WITHDRAWAL:

AS STATED ON QUESTIONNAIRE

	Total	Percent
Academic reasons	82	28.6
Motivation	37	12.9
Immaturity	30	10.5
Emotional	26	9.1
Mental Health	24	8.4
To attend other college	20	7.0
Money	14	4.9
Harvard is waste of time	13	4.5
Asked to leave	8	2.8
Physical health	7	2.4
Travel	6	2.1
Marriage	6	2.1
Parents	6	2.1
Confused about major	2	.7
Work	1	.3
Wanted year off	1	.3
No answer	7	2.4
	287	

Where did the dropouts rank academically at the time they left college? What level of achievement characterized their performance? The Rank List for the vast majority of the students at the time they withdrew from college was strikingly poor. 869, or 59.8%, were ranked 'Unsatisfactory'. Another 20.6% were in the lower half of the Rank List (IV-VI), leaving only 12.1% in the three upper levels.

These findings immediately raise interesting theoretical questions. Do these large numbers of students leave college because of inadequate intellectual endowment? Or do they possess adequate intellectual equipment whose functioning becomes impaired by emotional, environmental, or other factors? To determine the answers to these questions, we ascertained the intelligence level and academic potential characterizing members of the sample.

The evidence of our data implies that the vast majority of dropouts had the intellectual capacity to do satisfactory work; many had the capacity to do superior work. About 12% had a PRL of I or II; 52.1% ranked in or above level III; and 88.2% ranked in or above level IV (equivalent to a B-/C+ average). In addition, 16.4% had SAT Verbal scores in the 700's, with 37.2% above 650. 23.3% had SAT Math scores in the 700's, with 41.7% above 650. Section IV will discuss this matter again in terms of a comparison between significant subsets. Detailed correlation of dropout scores with those of the general Harvard population remains, however, a problem for future investigation.

The high potential and poor achievement of these students, the gap between prediction and performance, adds further weight to our hypothesis that factors other than intellectual ability contribute significantly to the high attrition rate.

We then investigated the issue of major field of concentration, a more specialized measure of both interest and ability. Do students who withdraw tend to be over-represented in particular areas? Are they more attracted to certain fields than to others?

A comparison of our data with population statistics for the Classes of 1959 and 1960 reveals the following:

	General Population	Dropouts
Humanities & Literature	29.0%	29.6%
Natural Science	26.5%	24.2%
Social Sciences (incl. History, Economics, Gov.)	44.5%	40.8%

In light of the 5.8% in the dropout sample who had not yet decided on a major, the percent of dropouts coincides remarkably with the population norms. (The investigator has the impression, however, that these broad categories mask significant trends. For instance, the dropouts may be over-represented in Social Sciences, meaning only Psychology and related fields, while under-represented, when compared with the general population, in History-Economics-Government. This hypothesis awaits future verification.)

What type of secondary school most frequently appears in the educational background of the sample? Does private school preparation make a student more or less prone to withdraw from college? Surprisingly, 54.5% of the dropouts had a private school education before attending Harvard; only 45.5% graduated from public school. These statistics are a striking reversal of the ratio for the student body in general at a comparable time - i.e., 48% private and 52% public.- and engender a number of interesting questions about the value of private school training. These too, however, await future research.

How did those students who eventually returned to Harvard - 701 or 48.2% - fare on their return? 15.4% graduated with some form of distinction: 9.8%, cum laude; 5.4%, magna cum laude; and .4%, summa cum laude. 2.8% were elected to Phi Beta Kappa. Comparison of these statistics with those of the general population will be investigated in a later project.

What happened, on the other hand, to the large number of students who failed to return to Harvard? Did they continue their education elsewhere, or did they abandon their aspirations for a college degree?

In order to ascertain answers to these and other questions, the principle investigator devised and mailed a questionnaire to all those who had not returned to Harvard by August of 1963, more than three years after the last of the sample had initially withdrawn from the University. This number included all those who had returned once, twice, or three times, but who had dropped out again and were neither listed as graduates nor registered as current students at the time of the mailing. Appendices A and B discuss the methodology and statistics of the follow-up effort in detail.

728 students, about 50% of the total sample, were considered as 'not returned' and sent questionnaires. 288, about 40% of the recipients, returned the questionnaires which provided follow-up information of from three to eight years.

Preliminary analysis of the questionnaires reveal that 90.6% of those not returning held jobs for various lengths of time. 23% had one job; 24%, two jobs; 18.3%, 3 jobs, and 11%, 4 jobs. 18% were employed for one year; 17%, for 1½-2 years; and 25%, for only six months or less (this category could include summer jobs).

55.1% served in the military, 26.5% in the army with rank. The majority served between two and three years; 11%, for only 6 months or less.

Of greater interest, however, is the fact that 60% of those not returning to Harvard continued their education at another college. 49% of those who continued their education went to only one additional college. 35%, however, attended two additional ones, and 16%, three or more additional ones. These latter statistics are significant, revealing that 51% continued their 'dropout pattern' even after leaving Harvard. Equally significant is the distressing fact that for the 40% who did not attend another college, their withdrawal from Harvard may well have signified the termination of their formal education.

TABLE 5

DEGREES EARNED BY STUDENTS NOT RETURNED TO HARVARD

	Total	Percent*
BA or BS	68	40.0
MA or MS	21	12.4
Ph.D.	2	1.2
M.D.	10	5.9
L.L.B.	6	2.1
S.T.B.	4	2.4
B.D.	2	1.2
A.A.	1	.6
Unidentified	3	1.8
Certificate	1	.6
None	53	31.2
	170	(100.0)

*These percents are of those 170 students who went to another college after leaving Harvard; 117 of these, or 68.8%, earned a degree; 27.1% even earned a graduate degree.

What percent of those attending another college eventually graduated? Our data indicates that almost 70% of those who continued their education earned at least one degree. As revealed in Table 5, about 40%, a significantly high number, attained a graduate or professional degree.

In summation, between 50% and 60% of the men who did not return to Harvard failed to earn any degree, Harvard or otherwise. This is equivalent to more than 25% of the total dropout sample, a striking figure in view of their high academic potential.

Of those who did graduate from another college, how well did they do academically? Answers to a question on 'honors earned' revealed that approximately 45% achieved some form of distinction, although only 9.2% graduated with honors, a lower percentage than for those who returned to Harvard. 7.6%, on the other hand, were elected to Phi Beta Kappa, a higher percentage than for the Harvard graduates.

Among those dropouts who did not return to Harvard, how many sought professional help? The questionnaires reveal that 44.3% consulted some professional, 32.8% seeking psychiatric help. The remainder visited a vocational counsellor (5.2%), a minister (4.5%), or a medical doctor (1.3%). These statistics further confirm the impression that emotional distress played a significant role in the decision to leave the University.

Does this distress relate in any way to the family background of these students? Do specific patterns characterize their home life? Table 6 shows the family situation of the general Harvard undergraduate, the general Harvard dropout, and the dropout who failed to return to the University. The divorce statistics reveal that a higher percentage of the dropouts come from homes severed by divorce than do those in the general Harvard population; the percent is even higher for those dropouts who do not return to Harvard. In addition, dropouts have a higher percentage of deceased parents than the general population. Dropouts with deceased fathers have a higher probability of returning to Harvard than of not returning, while

TABLE 6

STATUS OF PARENTS

	Population Statistics*	Total Drop-Out Sample	Drop-outs Not Returning: When Left	Drop-outs Not Returning: At Follow-Up
Divorced or Separated	6.0	116 (7.9)	25 (8.6)	35 (11.4)
Deceased:				
Father		238 (9.5)**	18 (6.3)	37 (12.9)
Mother		30 (2.1)	10 (3.5)	12 (4.2)
Total	8.8	264 (11.3)***	22 (7.7)	47 (16.4)
Together or No Data	85.2	1,174 (80.7)	238 (82.8)	207 (72.1)
	100.0	1,154	287	287

*Harvard Student Study
**21 (1.4%) died while student in college
***When both parents were deceased, the students was only included once in the total.

those with deceased mothers have a lower probability of doing so. The quesionnaire also revealed, for those who failed to return to Harvard, a striking increase in parental divorce and death in the interval between withdrawal from Harvard and the follow-up effort. All of these statistics are of special interest to the principal investigator who plans to explore their significance in subsequent projects.

V. THE PSYCHIATRIC DROPOUTS

Casual observation has suggested that the decision to leave college is frequently the result of severe emotional conflict. Is this impression confirmed by careful investigation? Is psychiatric disorder an important determinant in the dropout population? Is there a higher prevalence of mental illness among the dropouts than among the general undergraduate population?

Our findings indicate that the percentage of students who visited a psychiatrist before dropping out and who were diagnosed as having a specific disorder was approximately four times greater among the dropouts than among the general undergraduate population. 38.3% of the 1,454 dropouts (or 556) consulted a psychiatrist before leaving college, compared with a range of 8% to 10% for the general undergraduate population. An additional 5% consulted a psychiatrist after leaving. (See Appendix C.) 228, or 15.7% of the sample, were given medical riders, recommending medical approval before their re-admission; about 75% of such riders were for psychiatric reasons.

How do the psychiatric dropouts compare with the non-psychiatric dropouts in terms of the issues discussed in the preceding section? It is to this question that the present section is dedicated.

How do psychiatric and non-psychiatric dropouts compare in terms of rate of return to Harvard and eventual graduation? Does leaving college for psychiatric reasons lower the probability of return and graduation?

TABLE 7A

RATE OF RETURN - SUMMARY:

PSYCHIATRIC VS. NON-PSYCHIATRIC DROPOUTS

	UHS*	NON	TOTAL
RETURN:			
Graduated	263 (47.3)	438 (48.8)	701 (48.2)
Undergraduates	32 (5.8)	33 (3.6)	65 (4.4)
Total	295 (53.1)	471 (52.4)	766 (52.6)
NO RETURN:	261 (46.9)	427 (47.6)	688 (47.4)
TOTAL:	556 (38.3)	898 (61.7)	1,454 (100.0)

*literally, University Health Service; denotes those dropouts who consulted a psychiatrist at the Health Service and are considered 'psychiatric dropouts'.

Our findings indicate that there is no significant difference in the percent of each group who fail to return to Harvard and in the percent of each group to graduate by the date of follow-up efforts. (See Appendices A and B.) 46.9% of the psychiatric dropouts and 47.6% of the non-psychiatric dropouts had failed to return, while 47.3% of the psychiatric dropouts and 48.8% of the non-psychiatric dropouts had earned a degree. (See Table 7A)

These general statistics fail, however, to reveal a number of interesting trends. As can be seen in Table 7B, the psychiatric dropout has a higher probability both of returning to Harvard and of continuing to drop out. 85.3% of the psychiatric dropouts, but only 72.8% of the non-psychiatric dropouts, returned to Harvard. However, 51.1% of the psychiatric dropouts, and only 35.2% of the non-psychiatric dropouts, withdrew a second time.

Is there any difference between the two groups in the time elapsed before return? Our statistics indicate that the psychiatric dropouts return to college sooner than do the non-psychiatric dropouts. 14.3% of the former who return do so within the same year (12 months), as compared with only 8.9% of the latter. 74.1% of the former are back within two years (24 months), as compared with only 70.8% of the latter. Of those who return after dropping out a second time, 72.1% were back within 24 months, compared with 65.2% of the non-psychiatric dropouts. This pattern continues for those who return a third time.

What about the causes for leaving? Do they vary greatly between the two subsets? Our findings indicate that they do.

In terms of the reason given by the administrative board, 63.3% of the psychiatric dropouts left, on their first leave, for voluntary reasons (i.e., leave of absense and allowed to withdraw) while only 52% of the non-psychiatric dropouts did so. The latter group was over-represented in all the non-voluntary reasons for leaving (i.e., connection severed, probation closed, required to withdraw).

TABLE 7B

RATE OF WITHDRAWAL AND RETURN:
PSYCHIATRIC VS. NON-PSYCHIATRIC DROPOUTS

		Leave	Return	No Return
1ST LEAVE	UHS:	556 (38.3)	474 (85.3)*	82 (14.7)*
	NON:	898 (61.7)	654 (72.8)	244 (27.2)
		1,154	1,128 (77.6)	326 (22.4)
2ND LEAVE	UHS:	243 (51.1)**	79 (31.0)	164 (69.0)
	NON:	231 (35.2)	69 (30.1)	162 (69.9)
		474 (41.9)	148 (30.5)	326 (69.5)
3RD LEAVE	UHS:	21 (26.8)	7 (33.3)	21 (66.7)
	NON:	23 (33.9)	2 (8.7)	21 (91.3)
		44 (31.0)	9 (20.5)	35 (79.4)
4TH LEAVE	UHS:	1	0	1

*% of those who leave.
**% of those who return.

On the second leave, the situation begins to reverse itself, and by the third, the psychiatric dropouts are over-represented in the compulsory reasons for leaving.

In terms of the students' personal reasons for leaving, psychiatric dropouts most frequently cite 'medical' and 'personal' reasons. 31.8% of them left for personal reasons, compared with only 24.6% of the non-psychiatric dropouts. 20.5% of them left for medical reasons, compared with only 5.5% of the non-psychiatric dropouts. In all the other reasons (i.e., other college, study abroad, financial, military, etc.) the non-psychiatric dropouts were over-represented. For those who dropped out a second time, 21.2% of the psychiatric dropouts and only 6.9% of the non-psychiatric dropouts indicated 'medical' as the reason for leaving; 18.3% of the former and 21.7% of the latter indicated 'personal' as the reason. Again, the non-psychiatric dropouts were over-represented in all other categories.

As mentioned above, a certain number of students left with a University Health Service rider attached to their record cards, indicating that their return must be approved by a physician. On the first withdrawal, 30.2% of the psychiatric dropouts fell into this category, and only 6.6% of the non-psychiatric dropouts did so. On the second withdrawal, the percentages remained the same, while on the third, the number of non-psychiatric dropouts with riders increased.

When students who did not return to Harvard were asked, on the questionnaire, about their reasons for leaving, a larger percentage of psychiatric than of non-psychiatric dropouts indicated psychiatric-type reasons (i.e., mental health, immaturity, emotional, etc.); 36.6% of the psychiatric dropouts listed one of these as their first reason, compared with 22.4% of the non-psychiatric. More psychiatric than non-psychiatric dropouts also indicated 'academic difficulty' as the primary reason for leaving.* The non-psychiatric group was over-represented in categories of money, travel, marriage, motivation, etc.

*(33% vs. 22%)

TABLE 8

FIELD OF CONCENTRATION:

PSYCHIATRIC VS. NON-PSYCHIATRIC DROPOUTS

	UHS	NON
Literature	26.3*	23.4%
History-Ec.-Gov.	22.5	33.6
Social Sciences	13.5	10.2
Physical Sciences	10.8	10.7
Biological Science	6.5	4.1
Humanities	5.4	4.8
Applied Sciences	4.9	4.8
Mathematics	4.9	3.0
None	5.4	5.4
	100.0	100.0

*These figures tell the percent of each subgroup to major in a particular subject. A higher percent in the UHS column indicates that the UHS students are over-represented in the subject. UHS are most over-represented in the Social Sciences and most under-represented in History-Government-Economics.

Do significant differences in pre-college intelligence exist between the two groups? Are those who drop out for psychiatric reasons more or less intelligent than those who leave for other reasons? Our findings indicate that by all measures, the psychiatric group has the higher academic potential. 58.1% of the psychiatric dropouts were rated in the three upper Predicted Rank List levels, as compared to 48.8% of the non-psychiatric. 45.7% of the psychiatric group scored in the upper levels of the SAT Verbal test (651-800); only 31.4% of the non-psychiatric group did so. Again, 45.1% of the psychiatric group scored in the upper levels of the SAT Math test; only 37.8% of the non-psychiatric group did so.

Despite these statistics, however, there is little difference between the academic standing of both groups at the time of withdrawal. The psychiatric droupouts are, in fact, slightly over-represented in the Unsatisfactory level and under-represented in Rank List levels I-III (Unsatisfactory: 61.5% psychiatric, 59.0% non-psychiatric; I-III: 10.5% psychiatric, 13.2% non-psychiatric). From these statistics, it follows that the gap between prediction and performance is higher for the psychiatric dropouts than for the non-psychiatric dropouts. 74.4% of the former were under-achieving at the time of withdrawal, compared with 70.4% of the latter.

These findings raise many practical and theoretical questions. For example, what reasons exist for the higher level of intelligence (or academic potential) among the psychiatric dropouts? Is there a relationship between intelligence and susceptibility to emotional illness? Moreover, the large gap between ability and performance among the psychiatric dropouts demonstrates the severe deleterious influence of emotional illness on intellectual functioning, and underscores the need to understand and rectify factors in the college environment contributing to this illness.

Is there a difference between the two groups in terms of the type of secondary school they attended? Does one type of educational background make one more prone than the other to emotional difficulty at Harvard?

TABLE 9

HARVARD HONORS

	UHS	NON	TOTAL
Cum Laude	57 (21.3)*	86 (19.3)	143
Magna Cum Laude	28 (10.4)	51 (11.5)	79
Summa Cum Laude	3 (00.8)	3 (00.7)	6
	88 (32.5)	140 (31.5)	228

*These are percents of the students who graduated from Harvard. There is very little difference in performance.

Despite the fact that private school boys comprise the majority of the dropout sample, public school boys seek psychiatric help more frequently. 40.2% of public school graduates visited a psychiatrist compared with 35.5% of the private school graduates. The significance of this has yet to be explored.

What is the relationship between field of concentration and the tendency toward emotional conflict? Do psychiatric dropouts tend to favor certain majors over others? Table 8 reveals that psychiatric dropouts are over-represented in literature, social science, math, biological science, and humanities (in that order), and significantly under-represented in the fields of history-economics, and government. No significant difference appears in the fields of physical and applied sciences. Future research will be devoted to the question of whether certain modes of study create or attract the psychiatric dropout.

Of those students who return and ultimately obtain a Harvard degree, is there any difference between the two groups in honors received. Table 9 indicates that 32.5% of the former graduated with honors, while only 31.5% of the latter did so. 4.1% of the former were elected to Phi Beta Kappa, and only 3.6% of the latter were.

Of those students who did not return to Harvard, how did the psychiatric dropouts distinguish themselves from those who left for other reasons? About half of each group did not return and were sent questionnaires. About 40% of the recipients in each group responded.

Tabulation of these responses indicate that more psychiatric than non-psychiatric dropouts both held a job (93.8% versus 89%) and did military service (58.6% versus 51.0%).

A significantly higher proportion of the non-psychiatric dropouts continued their education in another college (64.5% of the non-psychiatric versus 52.6% of the psychiatric dropouts). Of those who went on to school, more of the non-psychiatric dropouts also earned a degree (78.4% compared with 52.5% of the psychiatric dropouts). Table 10

TABLE 10

DEGREES EARNED AT OTHER COLLEGES:
PSYCHIATRIC VS. NON-PSYCHIATRIC DROPOUTS

Degree	UHS	NON
B.A. or B.S.	20 (33.9)*	48 (43.2)
M.A. or M.S.	4 (6.7)	16 (14.4)
Ph.D.	0	2 (1.8)
M.D.	1 (1.7)	9 (8.1)
L.L.B.	0	6 (5.4)
S.T.B.	2 (3.3)	2 (1.8)
B.D.	1 (1.7)	1 (0.9)
A.A.	1 (1.7)	0
Unidentified	2 (3.3)	1 (0.9)
Certificate	0	1 (0.9)
None	28 (47.5)	26 (21.6)
	59	111

*Percents of those who went on to another college. 52.5% of UHS earned a degree versus 78.4% of Non-UHS. 15.1% UHS earned an advanced degree, versus 32.4% Non-UHS.

enumerates the degrees earned. Although the same percentage of each group earn only the bachelors degree, considerably more of the non-psychiatric dropouts continued for advanced training. Of those who did graduate from college, the psychiatric dropouts have a higher ratio of achieving distinction. 51.6% of the psychiatric dropouts and only 41.8% of the non-psychiatric dropouts attain honors. In addition, 9.7% of the former and only 7.0% of the latter are elected to Phi Beta Kappa.

In terms of professional help since leaving Harvard, 69.6% of the psychiatric dropouts sought some additional help, while only 27.7% of the non-psychiatric dropouts did. 58.1% of the psychiatric dropouts visited a psychiatrist or psychologists; only 16.7% of the non-psychiatric dropouts did so. This latter figure is significant, however, for it indicates that a sizeable percentage of those who were not diagnosed while at Harvard may, in actuality, have been suffering from some form of emotional distress, and may have withdrawn for undetected psychiatric reasons. This 16.7% forms 5% of the total dropout sample (See Appendix C).

Finally, how did the family backgrounds of both subsets compare? As Table 11 reveals, both the official record card and the questionnaire indicates that the psychiatric group had a higher parental divorce rate than the non-psychiatric group. A divorce in the family also seems to make a psychiatric dropout less likely to return to Harvard. The percent of parental divorce appears to increase markedly for the psychiatric group in the interval between leaving college and completing the questionnaire. In addition to these statistics, the rate of conflict between parents seems to be significantly greater in the psychiatric group. 42% of the psychiatric group, compared with only 32% of the non-psychiatric group, indicated that conflict characterized their home.

TABLE 11

STATUS OF PARENTS:

PSYCHIATRIC VS. NON-PSYCHIATRIC DROPOUTS

	Record Card		Psych. Record	Questionnaire When Left		Questionnaire At Follow-Up	
	UHS	NON	UHS	UHS	NON	UHS	NON
Divorced or Separated	50 (9.0)	66 (7.4)	52 (9.5)	13(11.6)	13 (7.5)	18(16.1)	14 (8.1)
Deceased							
Father*	54 (9.8)	84 (9.3)	44 (6.1)	8 (7.2)	10 (5.7)	10 (9.0)	27(15.7)
Mother	12 (1.2)	18 (2.0)	13 (2.3)	5 (4.5)	6 (3.5)	5 (4.5)	5(2.9)
Total:	65(10.8)	99(11.0)	57 (8.4)	10 (9.7)	13 (7.0)	14(12.6)	31(18.0)
Together or No Data	441(79.3)	733(81.6)	447(82.3)	89(79.5)	147(85.0)	79(70.5)	127(73.4)
	556	898	556	112	173	112	173
	1,454			285		285	

*9 UHS:Father died while in college.
12 Non-UHS:Father died while in college.
When both parents died, student counted in total only once.

VI. PRIMARY DIAGNOSIS

Mental disorder exceeds by far every other reason for dropping out of college. The disorder was of sufficient severity to prompt the student to seek medical help. As mentioned previously, 38.3% of the 1,454 dropouts consulted a psychiatrist before leaving college, and an additional 5% who did not consult one before leaving did so subsequently. In toto, therefore, 43.3% of all the dropouts consulted a psychiatrst either immediately before or after leaving college.

What types of mental illness interfere with the intellectual functioning of these students and cause them to interrupt their college careers? What categories of mental disorder characterize the drop--outs? In this section we will discuss some of our findings concerning the primary diagnostic categories of the psychiatric dropouts. These students, as previously defined, consulted a psychiatrist one or more times before leaving and were given, by the psychiatrist, a specific psychiatric diagnosis. We will discuss here only the primary diagnostic categories, leaving the secondary categories for analysis in a later project.

The psychiatric dropouts fall into four primary diagnostic categories. The psychoses, the most serious group of emotional diseases, describe patients whose mental functioning is sufficiently impaired to interfere with their capacity to meet the ordinary demands of life. They may suffer hallucinations, delusions, and other distortions in their capacity to recognize reality. Alteration of mood may be so profound that their capacity to respond appropriately is grossly impaired. Schizophrenia illustrates one form of psychotic illness.

The neuroses comprise a second primary diagnostic category. This group of illness is characterized primarily by anxiety, producing symptoms experienced as subjective stress from which the patient desires relief. Obsessive-compulsive neuroses is a disorder which falls within this primary diagnostic category.

Character (or personality) disorders comprise a third primary diagnostic category. This form of

TABLE 12

FIRST WITHDRAWAL:

PRIMARY DIAGNOSTIC CATEGORIES

Category	Number	Percent
Neuroses (N)	197	35.7
Adjustment Reaction of Adolescence (AA)	130	23.6
Character Disorder (CD)	122	22.1
Miscellaneous (M)	64	11.6
Psychoses (P)	39	7.1
	552	100.0

emotional disorder consists not of psychotic or neurotic symptoms, but rather of life-long, deeply-ingrained maladaptive patterns of behavior, destructive to the individual or at least a source of distress to him or to others. The hysterical character who tends toward suggestibility, irrational emotional outbreaks, dramatization, who is inclined to sexualize all relationships, is one example of a character disorder.

Adjustment Reaction of Adolescence, a fourth primary diagnostic category, occurs frequently among the age group within which our sample falls. Symptoms transient in nature and of various degrees of severity may result from overwhelming environmental stress, but usually related to the developmental process associated with adolesence and youth.

A fifth primary diagnostic category, labeled 'miscellaneous', includes all diagnosed illness not falling within the above four categories. Included in this category are the various organic brain syndromes and psycho-somatic disorders.

Among students who leave college for emotional reasons, neurotic disorder comprises the single largest diagnostic category (35.7%). The psychoses have the smallest representation, only 7.1% of the psychiatric dropouts. Table 12 enumerates the percentage in each group.

What is the relationship between the type of emotional illness afflicting a student when he leaves college and his probability of returning. As can be seen in Table 13, a student with a diagnosis of adjustment reaction of adolescence is most likely to return to college (90% of them return), while those with a diagnosis of psychoses are least likely to return (79.5% of the psychotics return).

Of the psychiatric dropouts who return, the psychotics are most likely to dropout a second time, while those with a diagnosis of adjustment reaction of adolescence are least likely to drop out a second time.

TABLE 13

RATE OF WITHDRAWAL AND RETURN:

PRIMARY DIAGNOSTIC CATEGORIES

1st Withdrawal		1st Return	
Neuroses	197(35.7)	Adj. Reaction	117 (90.0)
Adj. Reaction	130(23.6)	Misc.	55 (85.9)
Ch. Disorder	122(22.1)	Ch. Disorder	104(85.2)
Misc.	64(11.6)	Neuroses	162(82.2)
Psychoses	39(7.1)	Psychoses	31(79.5)
	552		469

2nd Withdrawal		2nd Return	
Psychoses	18(58.1)	Neuroses	34(43.6)
Misc.	31(56.4)	Psychoses	6(33.3)
Ch. Disorder	57(54.8)	Adj. Reaction	15(28.3)
Neuroses	78(48.1)	Ch. Disorder	14(24.6)
Adj. Reaction	53(45.3)	Misc.	4(12.9)
	237		73

3rd Withdrawal		3rd Return	
Neuroses	13(38.2)	Psychoses	2(100.0)
Ch. Disorder	5(35.7)	Adj. Reaction	2(100.0)
Psychoses	2(33.3)	Neuroses	2(15.4)
Adj. Reaction	4(26.7)	Ch. Disorder	0 0
Misc.	0	Misc.	0 0
	23		2

TABLE 14

NO RETURN AND GRADUATE:

PRIMARY DIAGNOSTIC CATEGORIES

A. NO RETURN

Misc.	36 (55.6)*
Ch. Disord.	66 (54.1)
Psychoses	20 (51.3)
Neuroses	90 (45.7)
Adj. React.	53 (40.8)
	265

B. GRADUATED

Diagnosis	Graduated	Current Students
Adj. Reaction	72 (55.4)*	5 (4.8)
Neuroses	98 (49.7)	9 (4.6)
Misc.	29 (45.3)	0
Psychoses	17 (43.6)	2 (5.1)
Character Dis.	50 (41.0)	6 (4.9)

*Percents are of those in each category to withdraw originally.

TABLE 15

PREDICTION AND PERFORMANCE:

PRIMARY DIAGNOSTIC CATEGORIES

Category	Predicted Rank		Actual Rank			Predict.-Perform. Gap
	High	Low	High	Low	Unsat.	Underachievers
▸Psychoses	45.9	54.1	12.8	25.7	51.3	66.7
Neuroses	60.1	39.9	9.7	21.3	59.9	74.3
▸Character Disorder	61.6	38.4	9.9	13.3	63.1	76.7
Adjustment Reaction	59.8	40.2	12.4	19.2	62.3	75.0
Misc.	54.8	45.2	7.8	16.3	64.1	75.0

What is the relationship between type of emotional illness and the possibility of obtaining a Harvard degree? Table 14 shows that 55.4% of those students with a diagnosis of adjustment reaction of adolescence returned to college and graduated. Those with a diagnosis of neuroses had the second highest probability , and those with a diagnosis of character disorder, the lowest porbability.

Is there a relationship between intelligence or the measure of academic potential and the type of illness which causes a young man to leave school? As Table 15 reveals, those students diagnosed as psychotic had, as a group, by far the lowest Predicted Rank List (PRL). Only 45.9% of those within this category were included in the high PRL group (levels I-III. 54.1% were in the low level (IV-VI). By contrast, those diagnosed as neurotics, character-disorders, and adjustment reaction of adolesence each had approximately 60% of their group within the high PRL range. In terms of College Board scores, about 29% of the character disorders ranked above 700 on the Verbal SAT, while only 21% of the adjustment reaction of adolescence did so. The psychotics and neurotics fell in between with 26% and 22% respectively. About 25% of each group achieved scores above 700 on the Math SAT.

Which type of disorders interfere most with actual intellectual functioning? Table 15 also shows the Actual Rank List at the time of first withdrawal. Note that despite the poor prediction for the psychotic group, they actually had the largest representation in the high Rank List group, and the least in the Unsatisfactory group. This conflicts with our expectations and points to a number of interesting ramifications to be explored in future studies.

Because of the above fact, the psychotics had the least tendency to be underachievers. Less than 67% of them fell into this category, compared with 75% of those with other diagnoses. (See Table 15.)

What relationship exists between category of mental disorder and type of secondary school attended? Table 16 reveals the provocative finding that the

TABLE 16

SECONDARY SCHOOL BACKGROUND

PRIMARY DIAGNOSTIC CATEGORIES

Category	Public	Private	Total
Psychoses	15 (39.5)	29 (60.5)	38 (7.0)
Character Disorder	53 (45.3)	64 (54.7)	117 (21.5)
Miscell.	31 (48.4)	33 (51.6)	64 (11.0)
Neuroses	96 (49.2)	99 (50.8)	195 (35.9)
Adjustment Reaction	64 (49.6)	64 (50.4)	129 (23.8)
	259 (47.7)	284 (52.3)	543 (100.0)

TABLE 17

FIELD OF CONCENTRATION:

PRIMARY DIAGNOSTIC CATEGORIES

Psychoses (7.1)*		Neuroses (35.7)		Character Disorder (22.1)		Adj. Reaction (23.6)		Miscellaneous (11.6)	
SocSci	(11.0)	Hum	(56.7)	AppSci	(29.6)	BioSci	(36.1)	PhySci	(14.8)
Lit	(8.3)	Math	(48.1)	Lit	(25.7)	AppSci	(29.6)	Math	(14.8)
HEG**	(8.1)	PhySci	(41.0)	BioSci	(25.0)	Lit	(27.8)	BioSci	(13.9)
Math	(3.7)	HEG	(37.4)	Soc Sci	(23.3)	HEG	(22.8)	HEG	(13.0)
AppSci	(3.7)	SocSci	(35.6)	PhySci	(21.3)	Math	(22.2)	SocSci	(12.3)
PhySci	(3.3)	Lit	(29.9)	HEG	(18.7)	PhySci	(19.7)	Hum	(10.0)
Hum	(3.3)	AppSci	(29.6)	Hum	(13.3)	SocSci	(17.8)	Lit	(8.3)
BioSci	(2.8)	BioSci	(22.2)	Math	(11.1)	Hum	(16.7)	AppSci	(7.4)

*These percents indicate the percent of those majoring in each particular subject to have a certain disorder. The percent in the total sample to have a particular disorder is listed under the disorder. Comparison of percents quickly reveal the fields in which a particular illness is over-represented. (I.e., the psychotics are over-represented in SocSci.)

TABLE 18

POST-HARVARD EDUCATION:

PRIMARY DIAGNOSTIC CATEGORIES

Disorder	Return Questionnaire*	Other Colleges**	Degree*** B.A.	Degree*** Adv. Deg.	Honors****
Psychoses	7(35.0)	2(28.6)	0	0	0
Neuroses	34(37.8)	19(57.6)	7(36.8)	1(STB)	5(71.4)†
Character Dis.	29(44.0)	14(46.7)	7(50.0)	1(AA)	4(57.1)†
Adj. Reaction	22(41.5)	11(52.5)	9(90.0)	3(MD)	3(33.3)
Miscellaneous	23(63.9)	15(65.2)	7(50.0)	3(MA, MD, BD)	4(57.1)†

*Percents are of those in each category who did not return to Harvard.
**Percents are of those in each category who returned the questionnaire.
***Percents are of those in each category who attended another college.
****Percents are of those in each category who earned a degree.
†1 in each category was elected to Phi Beta Kappa.

more severely disturbed students, those with psychoses and character disorders, had private school backgrounds. The principle investigator hopes to explore the significance of this relationship in a future study. For instance, do private or boarding schools tend to draw students more prone to emotional illness or do they help precipitate the illness?

Is there a relationship between specific types of emotional disorder and major field of concentration? Do students with potential for certain psychiatric disorders tend to major in specific fields of concentration? Our findings in this area, expressed in Table 17, indicate that the most seriously disturbed students, those diagnoses as psychotics, were most likely to major in the social sciences and least likely to major in the biological sciences. Students diagnosed as neurotic were most likely to major in history and also the least liekly to major in the biological sciences. Students diagnosed as character disorders were most likely to major in the applied sciences, least likely to major in math. Students diagnosed as adjustment reaction of adolescence were most likely to major in the biological sciences, least likely to major in history. In summary, the psychotics tend to major in social sciences and to avoid the most exact sciences. Neurotics tend to major primarily in math and the humanities, character disorders in the applied sciences, and the adjustment reaction of adolescence group in literature and the biological sciences.

As far as honors were concerned for those psychiatric dropouts who returned to Harvard and graduated, students with a diagnosis of neuroses (as would be expected especially of obsessive compulsive disorders) were the most likely to win honors and to be elected to Phi Beta Kappa.

What happened to the psychiatric dropouts who did not return to Harvard? Is there a relationship between diagnostic category and the direction their lives will take once they leave the University? Does knowing their diagnosis give us a clue as to whether or not they will enter another college, graduate, or achieve honors? As Table 18 illustrates, we found that those students with a diagnosis of neuroses were most likely to attend another college, those with the diagnosis of

psychoses, least likely.

How did the psychiatric dropouts fare once they entered another college? The figures here are rather startling. None of the students with a diagnosis of psychoses earned a degree from another college, whereas 90% of those students with a diagnosis of adjustment reaction did so. 36.8% of those students with a diagnosis of neurosis and 50% of those with a diagnosis of character disorder earned a degree at some other college.

How did these psychiatric dropouts who graduated from another college perform academically? Table 18 again shows that a substantial majority of those with a diagnosis of neuroses graduated with honors, with character disorder and adjustment reaction of adolescence in second and third place.

These findings concerning the specific categories of illness afflicting students who leave college also raise important practical and theoretical questions. They give suggestive information on the degree of intellectual impairment each type of illness imposes on a student and some impression of how long the impairment will continue before the student recovers sufficiently to resume his studies. They also give an impression of the probability of recovery, of return to college, etc., for each type of illness. These findings can be helpful to psychiatrists in assessing whether or not a student is ready to return to college and to other university personnel in predicting and planning for returning students.

VII. CONCLUSIONS

1. Within a period of 5 years, 1,454 undergraduates men withdrew from Harvard. Approximately 24% of each class withdraws during its 4 years in college; this percent has remained relatively constant over the past 20 years, despite the draft and increasing standards for admission.

2. Emotional illness far outweighs every other reason for dropping out of college; more than 43% of the sample leave for psychiatric reasons. The psychiatric records of the University Health Services revealed that 38.3% of the students (556) suffered emotional conflicts sufficiently severe to prompt them to seek medical help before leaving and to be given, by the psychiatrist, a specific diagnosis. About 5% of the sample who did not consult a psychiatrist before leaving college consulted one after leaving.

3. Although 50% of the dropouts (12% of each class) return to graduate from Harvard, more than 700 of the students who withdrew failed to obtain a degree from Harvard, and approximately 420 (60%) of these students failed to obtain a degree from any college. The high academic potential of these students underscores the enormous, ever-increasing pool of untapped brain power resulting from the dropout phenomenon.

4. The Registrar's Office revealed that 57% of the 1,454 students left voluntarily, while 42.1% left under compulsion from the University.

5. The majority of students (38.1%) gave personal or medical reasons as the primary cause of their dropping out.

6. Although the dropouts had high - many had superior - academic potential, their academic performance at the time of leaving college was strikingly poor. About 60% left with an unsatisfactory class rank. The large gap between academic potential (as measured by College Board scores, and rank in secondary school) and academic performance (as measured by rank in college class) suggests that almost without exception, the dropout has adequate intellectual capacity, tends

to have this capacity impaired by emotional and, to a lesser extent, environmental factors, and tends, therfore, to be an underachiever.

7. Comparing our sample with the general undergraduate population, we found no difference in terms of major field of concentration when the majors were divided into broad categories. A glance at a more detailed breakdown of majors - which we hope to explore in future projects - suggests the dropouts to be over-represented in the Social Sciences.

8. Students with private school backgrounds have a higher probability of dropping out than students who attended public schools.

9. Follow-up studies on the dropouts who did not return to Harvard revealed:

a) 55% served in the military.

b) 60% of those not returning to Harvard continue their education at another educational institution. Many of these students (51%) continue their dropout pattern after leaving Harvard - attending as many as three or more other colleges.

c) Of those who attend another college, 70% eventually earn a degree, 45% of these students earning some form of distinction; 7.6% of these earn Phi Beta Kappa, a higher percent than for the dropouts who return and graduate from Harvard.

d) 40% of the dropouts who fail to graduate from Harvard attend no other colleges and therefore terminated their formal education.

10. Of the 1,454 students who withdrew, 48.2% return and graduate from Harvard, 15.4% with some form of honors; 2.8% are elected to Phi Beta Kappa.

11. Among the students who failed to return to Harvard, 44.3% sought professional help, the large majority consulting a psychiatrist, although some consulted a vocational counsellor or minister.

12. The dropout sample had a significantly higher percentage of divorced parents than the general undergraduate population; and the students who failed to return to Harvard had a significantly higher percent of divorced parents than the general dropout sample.

13. Dropouts have a significantly higher percentage of deceased parents than the general Harvard undergraduate population. 238 of the students who dropped out had deceased fathers, 21 of them lost their fathers during the time the student attended college.

14. Dropouts with deceased fathers have a higher probability of returning to Harvard than of not returning and those with deceased mothers, a lower probability of doing so.

15. The percent of students who visited a psychiatrist was approximately four times greater among the dropouts than among the general undergraduate population. 38.3% of the 1,454 students (or 556) consulted a psychiatrist before leaving college, compared with a range of 8% to 10% for the general undergraduate population.

16. Medical riders (making it necessary for the student to be cleared by a doctor before being considered for readmission) were attached to 228 students, or 15.7% of the sample. 75% of these riders involved psychiatric illness.

17. The psychiatric dropouts tend to return to college and to graduate as frequently as the non-psychiatric dropout.

18. The psychiatric dropouts return to college sooner than the non-psychiatric dropouts, but also tend more frequently to drop out a second time.

19. Voluntary withdrawals from college are more frequent among the psychiatric dropouts than among the non-psychiatric dropouts. The latter group are over-represented in all of the non-voluntary reasons for leaving. Among those students who leave a second and third time, the psychiatric dropouts are over-represented.

20. The psychiatric dropouts have higher academic potential (and intelligence) than the non-psychiatric dropouts. 50.1% of the psychiatric dropouts are in the upper three Predicted Rank List levels, compared to 48.8% of the non-psychiatric dropouts.

21. The psychiatric dropouts had a significantly larger gap between their prediction and their performance than the non-psychiatric dropouts, and thus tended more toward under-achievement.

22. Though more students with private school backgrounds drop out, students with public school backgrounds tend to drop out for psychiatric reasons more frequently than students with private school backgrounds. However, the more serious psychiatric illnesses tend to be over-represented among dropouts with private school backgrounds.

23. Students who leave college because of emotional illness are over-represented in the Social Sciences, Math, and Biological Sciences, and significantly under-represented in History-Economics-Government. No significant differences appear between the psychiatric and non-psychiatric groups in the physical and applied sciences.

24. Among the dropouts who returned to Harvard, those who had left for psychiatric reasons won honors after they return as often as the non-psychiatric dropouts. None of the psychiatric dropouts attained Phi Beta Kappa.

25. The psychiatric dropouts who did not return to Harvard tended to enter the military more frequently than the non-psychiatric dropouts.

26. A higher proportion of the non-psychiatric dropouts continued their education at another college.

27. Of the students who attended another college after leaving Harvard, a larger percent of the non-psychiatric dropouts earned advanced degrees.

28. The psychiatric dropouts who graduated from other colleges had a higher percent who achieved academic distinction than their non-psychiatric counterparts.

29. About 70% of the psychiatric dropouts sought professional help after leaving Harvard, compared with 28% of the non-psychiatric group.

30. The psychiatric dropouts had a significantly higher parental divorce rate than the non-psychiatric group. In addition, a divorce in the family appears to lower the emotionally ill student's probability of returning to college.

31. The percent of parental divorce showed a striking increase for the psychiatric group in the interval between leaving college and completing the questionnaires. This finding reflect turmoil within the home that may relate to precipitation of illness in the student. A considerably higher percent of the psychiatric dropouts described their homes in terms of overt conflict.

32. The types of mental illness afflicting these students varies from the mildest, most transient disorder (Adjustment Reaction of Adolescence) to the most persistent and most malignant (the Psychoses). The 556 psychiatric dropouts fell into the following Primary Diagnostic categories: Adjustment Reaction of Adolescence (23.6%), Psychoses (7.1%), Character Disorder (22.1%), and Neuroses (35.7%).

33. The relationship between type of illness and rate of return to college indicates that students with a diagnosis of Adjustment Reaction of Adolescence have the highest probability of returning to college once they drop out and that those with a diagnosis of Psychoses have the lowest probability. Of the psychiatric dropouts who do return, the psychotics have the highest probability of dropping out a second time while those with a diagnosis of Adjustment Reaction of Adolescence have the lowest probability.

34. If one attempts to predict on the basis of the diagnosis whether a dropout will eventually obtain a Harvard degree, one finds that although the Adjustment Reaction of Adolescence have the highest probability of returning and graduating, the Character Disorders, not the Psychotics, have the lowest probability. As one might expect, the Character Disorders who attempt to resolve conflict by changing their environment keep dropping out, so that fewer of them graduate than any other group.

35. Relating type of mental illness with academic potential (or intelligence) we found that students with a diagnosis of Psychoses have the lowest academic potential (PRL) whereas those in the category of Adjustment Reaction of Adolescence, Neuroses, and Character Disorder all possess equally high academic potential.

36. Those students with the most severe mental illnesses, the Psychotics, demonstrate, surprisingly, the highest rank list at the time of withdrawal. Because these students possess the lowest Predicted Rank List, this finding is both startling and baffling. The most severe illnesses appear to interfere least with the quality of academic work. The Psychotic group had the least tendency to be underachievers. Unlike students leaving college with less severe forms of illness, these students were better able to keep intact the functioning of their intellect. Because this finding conflicts with expectations, we hope to explore in future studies, the reason some people suffer severe mental illness with relatively little impairment of intellect, while others with only mild illness show a marked impediment.

37. Among the students who left college because of mental illness, the more severely disturbed students - those with a diagnosis of Psychoses or Character Disorder - more frequently come from private school backgrounds. This finding also raises interesting theoretical and practical questions. Does private or boarding school experience make the student more prone to psychiatric illness, or do these schools merely draw students more susceptible to illness? These and other questions relating to the differences between public and private school college dropouts will be explored in a later study.

38. The students with the most serious illness - the Psychotics - tended to major in the Social Sciences. They were least likely to major in the Biological Sciences. Students with the milder, more transient forms of emotional illness - the Adjustment Reaction of Adolescence - tended to major in the Biological Sciences, while the Neurotics tended toward Math and the Humanities, and the Character Disorders, toward Applied Sciences.

39. Among the psychiatric dropouts who returned to Harvard and graduated, students with a diagnosis of Neuroses, especially those with a secondary diagnosis of Obsessive Compulsive, were most likely to win honors and to be elected to Phi Beta Kappa.

40. Knowing a student's diagnosis gives a clue as to the direction his life will take once he leaves college. Those with a diagnosis of Neuroses showed the highest probability of returning to Harvard and graduating with honors. Among those who did not return to Harvard, students with a diagnosis of Neuroses were most liekly to attend another college, while those with a diagnosis of Psychoses were least likely.

41. Knowing the diagnosis of a dropout also helps one predict how he will fare once he enters another college. Not one of the students with a diagnosis of Psychoses graduated from another college, whereas 90% of those with a diagnosis of Adjustment Reaction of Adolescence did so. As with the students who returned and graduated from Harvard, those with a diagnosis of Neuroses were most likely to graduate with honors.

42. The longer a student waits before returning to college, the less chance he has of obtaining a degree. If he does not return to college within two years, he has less than a 50% chance of ever-returning.

43. Focusing on the Black students in our sample, we noted that American Blacks have a higher dropout rate than the average undergraduate population. African Blacks, on the other hand, have a much lower dropout rate.

VIII. RECOMMENDATIONS

1. Because of the high incidence of emotional disorder that directly determines the high attrition rate among college students, the University must become as concerned with the emotional development of the student as with his intellectual development. In addition to the need for an adequate psychiatric staff, college administrators as well as faculty members need to acquire some awareness of the emotional conflicts characteristic of the college age group, that is, to become aware of how students feel as well as how they think. The intellectual relationship between students and other members of the University can be enhanced if professors and administrators come to understand the feelings of the student. Our findings underscore the significance of meaningful interpersonal interaction to the learning process, a significance that has only begun to be explored and understood.

2. Until institutions of higher learning develop an active preventive program which identifies students susceptible to emotional illness (before precipitation of the illness) the high attrition rate within the United States will continue and the pool of talented students handicapped by lack of a college education will increase.

3. The first step in a preventive program lies in a detailed profile of the dropout-prone student as outlined in the body of this report. Though based on analysis of only 2 of the 90 variables available (the other 88 variables to be analyzed in future studies), the profile is already sufficiently complete to be of immeasurable help in identifying potential dropouts. For example, the striking incidence of divorced and deceased parents among the dropouts, as compared to the general undergraduate population, and the high incidence of severer forms of psychiatric illness among private school students are findings that can be put to immediate use in a preventive program. Together with many other aspects of the profile, these findings can assist professors, deans, counsellors,

and college psychiatrists to observe students most susceptible to leaving college and to detect the onset of psychiatric disorder at its earliest stages. Steps of prevention and early diagnosis can then be taken before the disorder progresses to the point of intellectual paralysis.

4. Though the bulk of our data remains to be analyzed, it has already yielded a clear picture of the family and secondary school backgrounds characteristic of the student who leaves college because of psychiatric illness. In addition, the data has also provided important clues to understanding environmental influences within the college which help precipitate illness. These environmental factors will be spelled out in detail as analysis of our data continues in future studies and will lead to specific recommendations for change. (A preliminary paper spelling out a few such recommendations based in part on our data was presented in May of 1970 at the annual meeting of the American Psychiatric Association and entered into the Congressional Record of June 2 by Congressman Albert H. Quie of the House Education and Labor Committee.) A foundation subsequently has requested permission to send copies of the paper to presidents of colleges and universities throughout the United States.

5. The data clearly emphasizes that colleges and universities, and especially graduate schools, would be remiss to screen out students with a diagnosis of emotional disorder. If they do so, they will lose many of their most gifted people. The only feasible solution to the problem entails a program of prevention - based on an understanding of the familial, social, and emotional characteristics of the dropout-prone student - and a program of early diagnosis and treatment.

6. Transfer of students from one university to another must be made easier. The follow-up studies of this project reveal that a significantly large number of students who had difficulty functioning at Harvard were able to function well in other institutions which perhaps better suited their emotional needs.

7. The finding that private school students have lower academic potential and are more prone to severe psychiatric illness than public school students raises many practical and theoretical quesions mentioned in the body of this paper that bear further investigation.

8. The recent policy of some colleges of encouraging students to withdraw from college for awhile should be pursued with full awareness that the students will be subject to considerable risk of never returning. The longer a student is away from college, the less chance he has of obtaining a college degree.

9. The findings concerning diagnostic categories can be helpful to psychiatrists, counsellors, and others in advising the large number of students who leave college each year for psychiatric reasons.

APPENDIX A

A DETAILED NOTE ON SELECTION OF THE SAMPLE

The principle investigator wished to include in his sample all those students who dropped out of Harvard College for any reason during the five years between September 1955 and June 1960 (i.e., in the five academic years, 1955-56, 1956-57, 1957-58, 1958-59, and 1959-60). Although a student might leave at any time during the academic year, his withdrawal was only recorded officially subsequent to the meeting of the Administrative Board at the end of each semester (in February and June). This sample, therefore, includes all those students who withdrew, according to the official records, in the years 1956, 1957, 1958, 1959, and 1960. 1,454 students withdrew within this five year period.

A student's withdrawal within this time interval need not have been his first withdrawal, nor his last. The official records of students who dropped out in this period were carefully checked and followed to determine whether they had withdrawn also at some point prior to September 1955 or whether they withdrew an additional time (or two) subsequent to June 1960. Table 19 illustrates the number who withdrew each year and indicates whether it was the student's first, second, third, or fourth withdrawal.

Table 20 reveals the number of students within each college class to withdraw in this five year period. The Classes of 1959 and 1960 were followed for their full four year term, the other classes only for three years or less.

The first follow-up effort occurred in the summer of 1963, more than 36 months after the termination date for collection of the sample. At that time, the records of each student in the sample were checked to determine whether they had returned to Harvard (and on what date they had returned), whether they had dropped out (and returned) an additional time, and whether they had graduated from Harvard. The addresses of those students who had not returned by this date (i.e., those who had neither graduated nor were currently Harvard undergraduates) were noted. They were sent questionnaires requesting additional data.

TABLE 19

YEAR OF WITHDRAWAL

Year	1st Withdrawal	2nd Withdrawal	3rd Withdrawal
to 1955	223 (15.3)	19 (1.3)	1 (.1)
1956	261 (18.0)	52 (3.6)	2 (.1)
1957	230 (15.8)	58 (4.0)	3 (.2)
1958	283 (19.5)	72 (5.0)	10 (.7)
1959	249 (17.1)	60 (4.1)	7 (.5)
1960	208 (14.3)	64 (4.4)	2 (.1)*
1961		73 (5.0)	7 (.5)
1962		55 (3.8)	5 (.3)
1963		17 (1.2)	7 (.5)
1964		2 (.1)	2 (.1)
	1,454	474	44

*One student withdrew for the fourth time in 1960.

The situation of the sample at that date (August 1963) was as follows:

	Total	UHS
RETURNED:		
Graduated	683 (47.0)	253 (45.3)
Current Student	61 (4.2)	25 (4.7)
Total	744 (51.2)	278 (50.0)
NOT RETURN:	710 (48.8)	278 (50.0)
	1,454	556

18 students (including 8 UHS) who were listed in the official records as having returned (and having no record of an additional withdrawal) were misfiled by the researchers as having not returned; they too were sent questionnaires. Therefore, 728 students (including 286 UHS) were sent questionnaires. (However, as 13 students had died before leaving, and 25 were ultimately recorded as deceased, probably only 700 to 715 questionnaires were sent out.)

288 questionnaires were returned, 39.9% of those who were sent a questionnaire. (If one eliminates the deceased students, 41.1% were returned.) 113 psychiatric dropouts returned it and 175 non-psychiatric dropouts, about 41% of each group which was sent a questionnaire. 6 of those 18 students who really had returned to Harvard (see above paragraph) also returned it; they were all UHS students.

The second follow-up occurred in the early Spring of 1964 (about 46 months after the termination date for collection of the sample). By this date, the situation had changed slightly. 21 additional students (including 13 UHS) had returned in the Fall of 1963, and 5 more (including 4 UHS) had returned in February of 1964. In addition, 4 had

TABLE 20

CLASS WITH WHICH THE SAMPLE ENTERED

Harvard Class	Number	Percent	Years covered
to 1957	262	18.0	Jr., Sr.
1958	206	14.2	Soph., Jr., Sr.
1959	256	17.8	Entire career
1960	248	17.1	Entire career
1961	257	17.7	Fresh., Soph., Jr.
1962	174	12.0	Fresh., Soph.
1963	45	3.1	Fresh.
1964*	2	.1	
Unknown	1		
	1,454		

*Transfered from earlier class.

dropped out again, and 18 had received their degrees early in 1964. The situation at that date looked as follows: (See Table 7A for the exact percents)

	Total	UHS
RETURNED:		
Graduated	638 + 18	253 + 10
Current Student	61 - 18 - 4	25 - 10 - 0
	21 + 5	13 + 4
Total	766	295
NO RETURN:	(710 - 26 + 4)	(278 - 17 + 0)
	688	261
TOTAL:	1,454	556

13 of the group which returned in the Fall of 1963 had also returned their questionnaire. Therefore, the situation with regard to the questionnaire is as follows:

	UHS	NON	TOTAL
Total questionnaires returned	113	175	288
Errors in mailing	6	—	6
Returned 9/63	7	6	13
Questionnaires from those who never returned	100	169	269

Therefore, we have questionnaires from about 39% of those who fail to return, from about 38.3% of the UHS who fail to return and from about 39.7% of the Non-UHS who fail to return. 6.6% of the questionnaires are from students who have returned.

TABLE 21

TIME OF RETURN AFTER WITHDRAWAL

Year	Months	First Return No.	First Return %	Second Return No.	Second Return %
Same	0-12	126	8.7	26	1.8
I	12-24	686	47.2	74	5.1
II	24-36	190	13.1	23	1.6
III	36-48	82	5.6	8	.6
IV	48-60	22	1.5	6	.4
V+	60+	22	1.6	8	.6
Not return		326	22.4	1303	90.0
		1,454		1,448	

(The third returns were all in year I.)

APPENDIX B

JUSTIFICATION FOR THE DATE OF FOLLOW-UP

The date of follow-up was chosen in such a way that the number of students reasonably predicted to return after such a date would not affect the totals referred to in this study in any significant way. Table 21 reveals the percent of students who returned in each time period after their withdrawal.

It should be clear from the table that if a student withdraws from Harvard, he has, on the basis of that action, only a 77.6% chance of ever returning. This is because only 77.6% of the students have actually returned. If he has not returned within 12 months, he then has only a 75.5% chance of returning. The reason for this figure is as follows: (1) the total (1454) less the number who return within 12 months (126) yields the number who could return after 12 months (1328); (2) the number who could return after 12 months (1328) less the number who never return (326) yields the number who actually return after 12 months (1002); (3) the number who actually return after 12 months divided by the number who could return after 12 months (1002/1328) yields the percent who could return after 12 months (75.5%). By the same process of reasoning, a student who has not returned within 24 months has only a 49.2% chance of ever returning; if not within 36 months, a 27.9% chance of returning; and if not within 48 months, only an 11.9% chance of ever returning.

The first follow-up effort for this study occurred more than 36 months after the termination date for the first withdrawal. (June 1960 was the termination date for withdrawals in terms of collection of the sample. The first follow-up occurred in August 1963.) The second follow-up effort occurred almost 48 months after such a date. Those who were to return within the 36-48 month interval had already returned (26 had returned in the Fall of 1963 and in February of 1964). Therefore, only 11.9% of those who had dropped out for the first time in 1960 would be likely to return after this date. 208 dropped out in 1960 (a total number for both January and June). 11.9% of 208 amounts to approximately 25 students who might possibly return. Certainly this would not affect the total to return in any significant way.

APPENDIX C

WHY 5% MORE PSYCHIATRIC DROPOUTS?

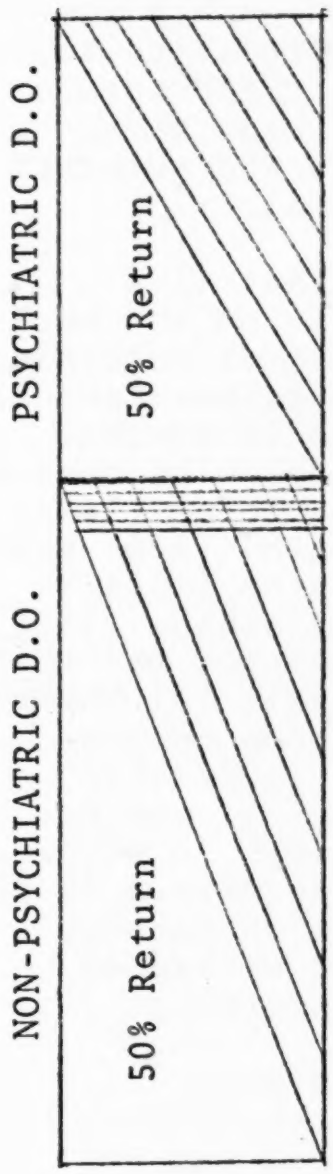


Figure 1

38.3% of the dropouts consulted a psychiatrist before leaving, were given a specific psychiatric diagnosis, and are considered as 'psychiatric dropouts'.

61.7% were not given a specific diagnosis by a University physician.

Half of each group did not return, represented by the lined portions in Figure 1. They were sent questionnaires.

16.7% of the non-psychiatric group who responded to the questionnaire indicated that they had sought psychiatric help after leaving Harvard, and could therefore be considered as undetected psychiatric dropouts.

16.7% of the half of the non-psychiatric dropouts who failed to return is 8.35% of the total of non-psychiatric dropouts, or (multiplying 8.35% by 61.7%) 5% of the total dropout population.

This 5% (doubled stripped in Figure 1) can be added to the psychiatric dropouts to yield 43.3% of the total dropout sample withdrawing for psychiatric reasons.

In addition, there may have been a certain number of students in the non-psychiatric group who returned (bottom unshaded portion) who saw a psychiatrist before returning.

APPENDIX D

PROSPECTUS FOR A BLACK STUDENT STUDY

While analyzing data for the above report, in this year of increased racial tensions, our discussions quite naturally led us to inquire about the number of Blacks included in our dropout sample.

To answer this question, we began to look at pictures of each of the sample as recorded in the Freshman Registers for each entering class. In so doing, we noted other Blacks not included in our sample, became intrigued with determining the number of Blacks in each class, and gradually formulated a plan to study in depth, using academic, psychological, and sociological variables, all Black students attending Harvard College from the Class of 1950 (entering September 1946) to the Class of 1973 (entering September 1969). Although the projected study must remain in the realm of possibility until sufficient funds are found to execute it, so intrigued and curious did we become that we set about collecting the names of those who would eventually comprise the sample of the Harvard Black Student Study.

Determining the members of this sample posed no small problem. As an initial step, the Freshman Class Registers for the Classes of 1950 through 1973, containing photographs of all entering Freshmen, were scanned; names of those Blacks entering with the class were noted. Subsequently, the Class Yearbooks, also containing photographs and compiled during the Senior year, were checked to determine: (a) which of our initial sample were not pictured, indicating a withdrawal from the class (i.e. - a dropout), and (b) which new faces appeared, indicating transfers into the class by way of change of college, Advanced Placement, or the return of a dropout. Two further steps remain to verify the accuracy of the list thus collected. We want to check the list of those pictured in the yearbook against a list of graduates issued after final examinations to determine whether any students were deleted before graduation, and we want to look at the confidential folders in the University Health Services to check the race of those students whose photograph did not provide conclusive evidence.

TABLE 22

CLASS	ADMITTED WITH CLASS						GRADUATED WITH CLASS												WITHDRE		
	American	African	Other	Advanced Standing		TOTAL	American	African	Other	Advanced Standing			Transfer			Returned Drop-outs		TOTAL	American	African	
				Am	Af O					Am	Af	O	Am	Af	O	Am	Af O				
1950	3					3	3			1			1					5			
1951	1			1		2	1						1					2			
1952	2					2	2											2			
1953	4					4	3											3	1		
1954	8					8	4						1					5	4		
1955	14					14	9						1					10	5		
1956	11		1			12	7						1					8	4		
1957	8					8	5						2					7	3		
1958	10	1				11	7					1						8	3	1	
1959	6		1		1	8	5		1							1		7	1		
1960	12	1	1			14	8	1	1									10	4		
1961	10	2	1			13	6	1	1			1						9	4	1	
1962	10	1			1	12	10									1		11		1	
1963	14					14	7				2		1	2				12	7		
1964	9			2		11	4				1			6				11	5		
1965	13			1		14	9				1			1				11	4		
1966	17	4		1		22	13	4		1	4		3	1		1		27	4		
1967	13			1	4	18	6				3		2					11	7		
1968	26	3	1		3	33	21	3								2		26	5		
1969	38	1	3			42	29		3									32	9	1	
1970	44	1				45															
1971	37	2				39															
1972	35	3	1			39															
1973	75	3				78															

THE MARGINAL LEGIBILITY OF THIS PAGE IS DUE TO POOR ORIGINAL COPY. BETTER COPY WAS NOT AVAILABLE AT THE TIME OF FILMING. E.D.R.S.

These final procedures must wait until the project is funded.

Merely collecting the names in the sample has, however, yielded some fascinating statistics. Table 22 provides the comprehensive figures.

Admissions

466 Black students were admitted to Harvard and registered in the 24 classes from the Class of 1950 to the Class of 1973. 422 (or 91%) of these were Americans, 33 (or 7%) were Africans, and 11 (or 2%) were Blacks from a non-American country other than Africa. (The latter group will be hence forth referred to as 'Other'.)

256 of these (or 56.6%) were members of the 20 classes, 1950-1969, which had already graduated by the time of collection of the sample (Fall, 1969). Of this number, 231 (or 87½%) were Americans, 24 (or 9%) were Africans, and 10 (or 3.4%) were Other.

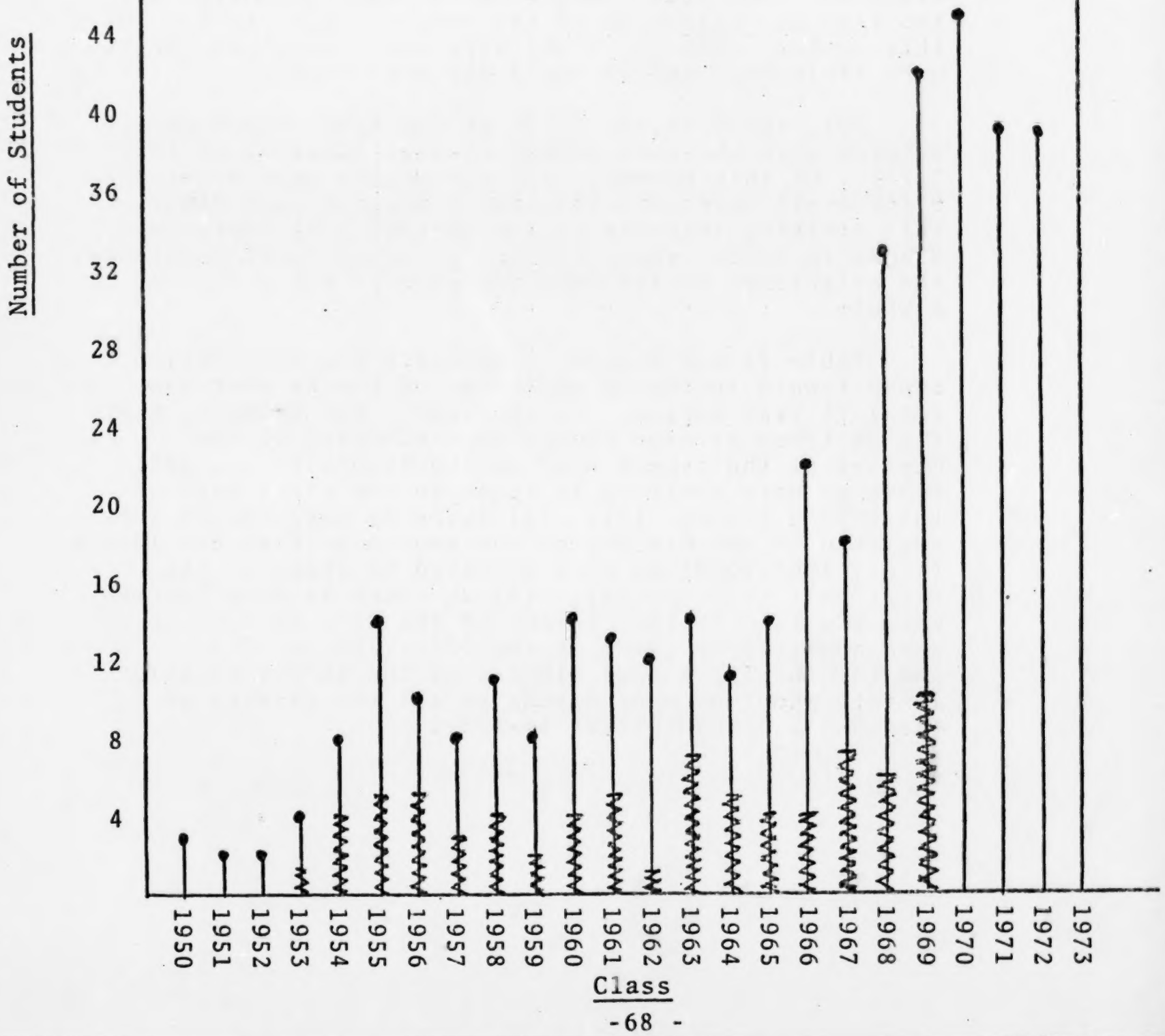
201, therfore, or 43.4% of the total Black sample entered with the most recent classes (Classes of 1970-1973). Of this number, 192 (or 95.5%) were Americans, 9 (or 4.5%) were Africans, and 1 (or .1%) was Other. This striking increase in the admission of American Blacks in recent years reflects, or at least parallels, the heightened social consciousness of the nation as a whole.

Table 22 and Figure 2 elaborate the distinctive trend toward increased admission of Blacks over the total 24 year period. It is clear, for example, that (1) 2½ times as many Blacks were admitted to the Classes of the second half of the 1950's (i.e., 1955-1959) as were admitted to those in the first half of the 1950's (53 vs. 19), (2) twice as many Blacks were admitted to the Classes of the second half of the 1960's (i.e., 1965-1969) as were admitted to those of the first half (129 vs. 64), (3) 2½ times as many Blacks were admitted to the classes of the 60's in toto as were admitted to those of the 50's (193 vs. 73), and (4) the first four classes of the 1970's contain in toto about as many Blacks as all the classes of the 1960's combined (191 to 193).

FIGURE 2

NUMBER OF BLACK STUDENTS
ENTERING WITH EACH CLASS

≷ = Withdrew



Graduation

217 Blacks in the first 20 classes (1950-1969) graduated from Harvard - 178 Americans (82%), 31 Africans (14.3%), and 8 others (3.7%). This number, however, includes only 189 (or 71.3%) of the original 265 Blacks mentioned above (i.e., 189 of the 265 Blacks pictured in the Freshman Registers); of this 189, 161 (85.2%) were Americans, 20 (10.6%) were Africans, and 8 (4.2%) were Other. The remaining 28 either transferred into the class from another college, or continued their studies after having withdrawn for a year or more. Of the 23 transfer students, 13 (or 56.5%) were Americans and 10 (43.5%) were Africans. Of the 5 returning dropouts, 4 (80%) were Americans and 1 (20.0%) was African. Table 22 lists by class and by nationality the number who graduated.

Advanced Standing

15 of the students who were pictured in the Freshman Register and who subsequently graduated did so within three years. This was possible either because they were granted Sophomore standing on the basis of their secondary school record, as is the case with certain foreign students (i.e., those from British schools), or because they merited this status through excellence performance on Advanced Placement tests taken after entrance. It is not surprising, in view of the first condition above, that 11 of these Advanced Standing students (73% of them) were Africans and that 2 were Other. This means that 55% of the 20 Africans who were listed in the Freshman Register and who also graduated did so within three years; the remaining 45% spent four years at Harvard.The percent of American Blacks who attained Sophomore status, presumably through tests on entrance, is appalling small (1.2%) in relation to the percent for the general college population (16.7%).

Dropouts

76, or 28.7%, of the Black students who began with the 20 classes of 1950-1969 had dropped out by the time of graduation. This number includes 70 Americans (19.2%), 4 Africans (5.3%), and 2 Others (2.6%). This percent (28.7%) is signifi-

FIGURE 3

PERCENT OF EACH CLASS WHO WITHDREW:

BLACK STUDENT STUDY

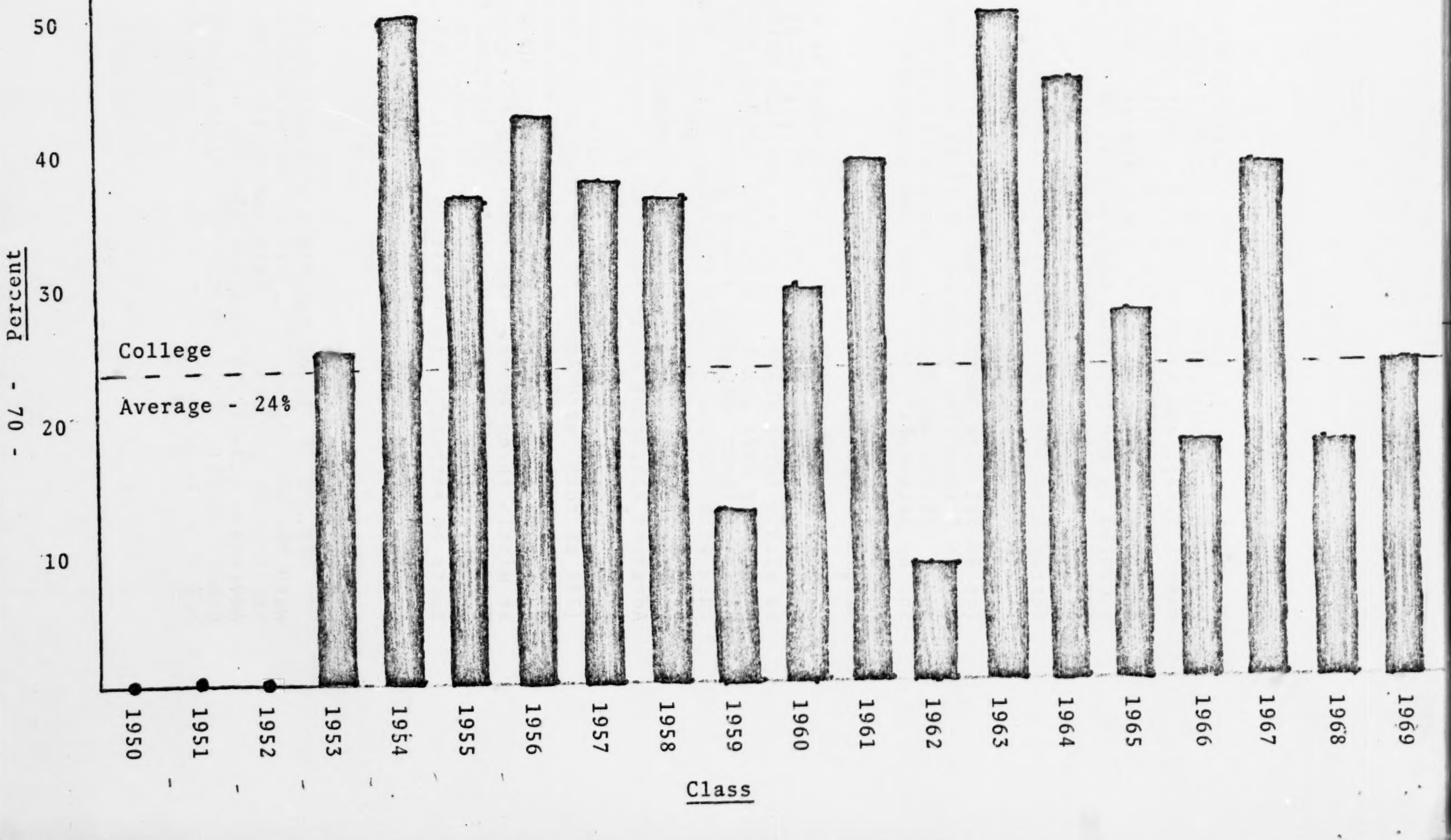


TABLE 23

PERCENT OF BLACKS TO WITHDRAW

Class	Percent
1950	0
1951	0
1952	0
1953	25
1954	50
1955	36
1956	42
1957	37.5
1958	36
1959	12.5
1960	28.5
1961	38.5
1962	8.3
1963	50
1964	45
1965	28.5
1966	18
1967	39
1968	18
1969	23.5

cantly above the dropout rate for the general population - 24%.

Focusing merely on the American Black dropouts, however, the percentage is even more striking. 30.3% of the American Blacks who began as Freshman withdrew while only 16.7% of the Africans did so. In addition, while the rate of return and subsequent graduation for dropouts in the general population is about 50% (leaving only about 12% of each class as a permanent loss), only 5.7% (or 4) of the American Blacks had returned by the time of our data collection. Only 1 African (24%) had returned. (The return rate for the total Black dropout population is 6.6%). The Blacks also take longer to return to Harvard than does the average dropout.

Table 22 enumerates the number who withdrew from each class while Table 23 and Figure 3 show these figures in terms of percent of the class to withdraw. While the number of dropouts increases as the number of freshmen admitted, the percent of Blacks to dropout reveals no obvious trend. Future study will focus on national and campus factors which might have contributed to significantly high or significantly low dropout rates (such as those for the classes of 1954 and 1962).

The Africans

While the focus in future studies will be on the American Black college student (89% of the sample), a focus relevant to the national crisis, the Africans (43 in number) and other non-American Black students form an interesting subset. These students, 53 in all, form 11% of the total.

24 Africans were listed in the Freshmen Register for the first 20 years of the study (1950-1969), forming 9% of the total of entering Blacks for those years. The four most recent classes (1970-1973) contained only 9 African members, 4.5% of the total Black population.

20 of the 24 mentioned above (or83.3%) graduated within four years of entrance, 11 of them within

within three years. Thus 55% of these African graduates attained their degrees with unusual speed. In addition, 10 African transfer students were graduated, as well as 1 returning dropout, bringing the total of African graduates (1950-1969) to 31. 33.3% of all graduating Africans were, thus, transfer students. In other words, 43% of all Black transfer students were Africans.

Four Africans (or 16.7%) of the 24 mentioned above withdrew from Harvard, only 1 (25%) to return. This is a lower dropout rate than that for the general Harvard population (24%) and a much lower rate than for American Blacks (30.3%). Although the rate of return is lower than that for the general dropout population (50%), it is considerably higher than that for American Blacks (5.7%). These figures indicate that once an African attains admission to Harvard, he has an unusually high probability to remain and graduate, frequently even before the class in which he enters.

As Table 22 ~~and Figure 4~~ reveal, the acceptance of Africans was highest for the classes of 1964-1968, at a time when the interest in Africa as an awakening continent was at its height, and prior to the recent concern for the education of American Blacks.

Other Black Students

10 Black students from non-African and non-American countries were listed in the Freshman Register for the years 1950-1969, and only 1 since then. 8 of them (80%) graduated, two (25%) within three years. Two of them dropped out. There were no returning dropouts or transfer students within this group.